



R20 Regulation

Subject code:3E6GB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, November 2025

WIRELESS NETWORKS

CSE(AI&ML)

Maximum Marks: 70

Date: 13.11.2025

Duration: 3 hours

- Note:
- 1.This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20 Marks)		Marks	CO	BTL
1	What is meant by Electromagnetic Spectrum.	2M	1	L1
2	Define Parity check with example.	2M	1	L1
3	Differentiate Hidden and Exposed Terminal Problems.	2M	2	L1
4	Define FAMA Protocol.	2M	2	L1
5	What is Routing Protocol	2M	3	L1
6	Describe Frame based Knowledge Representation.	2M	3	L1
7	How to provide security in Wireless Networks.	2M	4	L1
8	Classify Transport Layer in ADHOC.	2M	4	L1
9	What is Cluster TDMA?	2M	5	L1
10	Define Bandwidth Routing Protocol.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain in Detail Multiple Access Techniques.	10M	1	L2
OR				
12	a) Explain in detail HIPERLAN Standard with neat diagram. b) List out Basic MAC Layer Mechanisms.	5M 5M	1	L2
13	Classify Mac Protocol for Ad Hoc Wireless Networks.	10M	2	L2
OR				
14	Describe MACA with Piggy-Backed Reservation.	10M	2	L2
15	a) Explain Hidden and Exposed Terminal Problems? b) Discuss Cluster-Head Gateway Switch Routing Protocol.	5M 5M	3	L2
OR				
16	a) Explain about Dynamic Source Routing Protocol. b) Discuss Temporally Ordered Routing Protocol.	5M 5M	3	L2
17	What is TCP? Explain its Design goals of Transport Layer Protocol.	10M	4	L2
OR				
18	Explain Security in Ad Hoc Wireless Networks.	10M	4	L2
19	Explain QoS Parameters in Ad Hoc Wireless Networks.	10M	5	L2
OR				
20	Explain Trigger Based Distributed QoS Routing Protocol with example.	10M	5	L2

